

WHAT IS CLAIMED IS

1. A self-engageable fastener component, comprising:
a sheet-form base; and
an array of wedge-shaped, engageable elements extending integrally from at least one side of the sheet-form base, the engageable elements each having an engageable side and a non-engageable side conterminous at an upper edge of the element;
wherein the upper edge of each engageable element defines a curve in top view, and
wherein the engageable sides of a majority of the elements are oriented in a common direction.
2. The fastener component of claim 1, wherein the engageable elements are arranged in at least one row along the sheet-form base, the row extending toward said single edge.
3. The fastener component of claim 2, wherein the elements are arranged in an array of multiple rows and columns.
4. The fastener component of claim 2, wherein the elements are arranged in multiple rows, with elements of adjacent rows offset from one another along their respective rows.
5. The fastener component of claim 4, wherein the elements of adjacent rows are offset by about one-half a nominal spacing between adjacent elements within a row.
6. The fastener component of claim 1, wherein the curve defined by the upper edge in top view is substantially circular with a constant radius of curvature.
7. The fastener component of claim 6, wherein the constant radius of curvature is from about 0.25 to 2.5 centimeters.

8. The fastener component of claim 1, wherein the curve defined by the upper edge in top view is of a group consisting of parabolic curves, ellipsoidal curves, hyperbolic curves, and mixtures thereof.

9. The fastener component of claim 1, wherein a maximum elevation of the upper edge above the top surface of the sheet-form base is between about 0.025 and 6.3 millimeters.

10. The fastener component of claim 1, wherein each engageable element has a width, measured along the sheet-form base perpendicular to said single edge, of between about 0.13 and 6.3 millimeters.

11. The fastener component of claim 1, wherein each engageable element has a length, measured along the sheet-form base parallel to said edge, of between about 0.13 and 2.54 centimeters.

12. The fastener component of claim 1, wherein the non-engageable side of each fastener element rises from the sheet-form base at an angle of between about 5 and 45 degrees.

13. The fastener component of claim 1, wherein the engageable sides of the wedge-shaped elements overhang the sheet-form base.

14. The fastener component of claim 13, wherein the engageable side of each fastener element extends downward from the upper edge toward the sheet-form base at an undercut angle, measured in a midplane bisecting the fastener element and perpendicular to the sheet-form base, of between about 10 and 45 degrees.

15. The fastener component of claim 1, wherein the engageable elements extend outwardly from two opposite sides of the sheet-form base.

16. The fastener component of claim 1, further comprising hook-shaped projections proximate the wedge-shaped engageable elements.

17. The fastener component of claim 1, further comprising engageable loops proximate the wedge-shaped elements.

18. The fastener component of claim 1, wherein the sheet-form base forms a tube, with the wedge-shaped elements extending from a curved surface of the tube.

19. The fastener component of claim 18, wherein the curved surface comprises an outer surface of the tube.

20. The fastener component of claim 18, wherein the curved surface comprises an inner surface of the tube.

21. The fastener component of claim 18, wherein the tube defines a longitudinal gap extending along its length between opposite edges of the sheet-form base.

22. The fastener component of claim 1, wherein the sheet-form base forms an elongated, U-shaped structure.

23. The fastener component of claim 22, wherein the wedge-shaped elements extend from an inside surface of the U-shaped structure, a majority of the engageable sides of the wedge-shaped elements directed away from an open edge of the U-shaped structure.

24. The fastener component of claim 22, wherein the wedge-shaped elements extend from an outside surface of the U-shaped structure.

25. The fastener component of claim 1, wherein the sheet-form base forms an elongated strap.

26. The fastener component of claim 25, comprising only a single row of said wedge-shaped elements, all arranged with their engageable sides directed toward an end of the strap.

27. The fastener component of claim 25, defining an aperture adjacent one end of the strap, the aperture sized to receive an opposite end of the strap therethrough.

28. The fastener component of claim 27, further comprising an exposed retention edge along one side of the aperture, the retention edge positioned to engage the engageable sides of the wedge-shaped elements with the opposite end of the strap pulled through the aperture, to resist removal of the strap from the aperture.

29. The fastener component of claim 1, wherein the sheet-form base is secured to, and overlays a layer of resilient material.

30. The fastener component of claim 29, wherein the sheet-form base is flexible.

31. In combination, two fastener components each according to claim 1, arranged with the engageable sides of their wedge-shaped elements overlapping one another to resist shear motion between the fastener components.

32. A method of making a fastener component, the method comprising:
providing a molding tool defining an array of cavities extending inwardly from an outer surface thereof;

transferring moldable resin onto the outer surface of the molding tool; and

pressing the moldable resin into the cavities of the molding tool, thus forming the engageable elements, while forming a base of resin on the surface of the molding tool, the base interconnecting the engageable elements;

wherein the cavities form engageable elements that are wedge-shaped, each wedge-shaped element including an engageable side and a non-engageable side conterminous at an upper edge of the element, wherein the upper edge of each engageable element defines a

curve in top view, and wherein the engageable sides of a majority of the elements are oriented toward a single edge of the sheet-form base.

33. The method of claim 32, wherein the molding tool comprises a rotatable mold roll positioned adjacent a counter-rotating pressure roll to define a pressure nip in which the moldable resin is pressed into the cavities to form the engageable elements.

34. The method of claim 33, further comprising introducing a sheet material into the nip with the moldable resin, and laminating the moldable resin to the sheet material under pressure in the nip.

35. The method of claim 34, wherein the sheet material comprises a scrim material.

36. The method of claim 32, further comprising forming the planar sheet material into a tube, the engageable sides of a majority of the engageable elements being directed away from a common, open end of the tube.

37. The method of claim 32, wherein the fastener component is in strap form, the method further comprising forming an aperture at one end of the fastener component, the aperture sized to receive an opposite end of the fastener component;

the fastener component comprising an exposed retention edge along one side of the aperture, the retention edge positioned to engage the engageable sides of the wedge-shaped elements with the opposite end of the strap pulled through the aperture, to resist removal of the strap from the aperture.

38. A seat bun, comprising:
a compliant material with a surface having a central region bounded on two opposite sides by elongated trenches; and
a fastener component according to claim 1 disposed within each trench and arranged with the non-engageable sides of its wedge-shaped elements directed out of the trench.

39. The seat bun of claim 38, wherein the fastener components comprise elongated, U-shaped structures extending along each trench.

40. The seat bun of claim 38, wherein the fastener components comprise tubular structures embedded within each trench.